UNION SANITARIA DE PRODUCTOS ALIMENTICIOS S.A.de C.V. TIF 95
(Food Products Sanitary Union, stock company of variable capital TIF number 95)

"HACCP"

(Hazard Analysis and Critical Control Points)

TIJUANA, B.C.

III) First six steps for the development of the Hazard Analysis and Critical Control Points (HACCP)

3.1 HACCP Team Formation

This team is formed by a group of persons with multiple disciplines that includes engineering, production, health, quality control, and food microbiology. It includes personnel directly related with the daily activities, as well as the operation variants and limitations.

They have the knowledge and experience necessary to identify the potential risk factors, to assign severity and risk levels, to recommend controls; criteria and knowledge for the monitoring and verification, to recommend the corrective actions that are appropriate at the moment in which the deviation occurs and to perform the observations relative to the HACCP plan.

The persons that integrate this team are:
Person in charge of production
Maintenance head
Plant head
HACCP person in charge

3.2 Description of the food and its distribution method:

Union Sanitaria de Productos Alimenticios (USPA) is an industry that imports, processes, distributes and exports pork. It is a Federal Inspection Type of plant, recognition that is granted by the Ministry of Agriculture and Livestock (SAGAR) to Slaughter and Packing plants of fresh and processed meat that comply with the strictest hygienic and sanitary standards.

Besides it has the certification of the Department of Agriculture of the United States (USDA) in order to be able to export products to that country.

In USPA swine carcasses are received from TIF and/or USDA slaughter plants of Canada, United States and Sonora, together with these carcasses combos with fragmented pigs are received. The process that is performed here consists in the cutting and boning of each of the parts that form the carcass and the trimming of fat and skin. Polyethylene bags of food grade are packed in carton boxes that are closed with iron strips and labeled, they go into quick freezing by means of a freezing tunnel with "Blast Freezer" air circulation. They are stored on steel shelving during approximately 8 hr at – 25°C +/- 5°C in order to completely freeze the product, also, when freezing is quick the meat tissue does not produce large size crystals as would be the case when there is a

slow freezing. After this time they are placed in a freeze preserving room (-15°C +/- 3°C) until its distribution. It is marketed frozen and it is recommended that the packages be preserved at low temperatures.

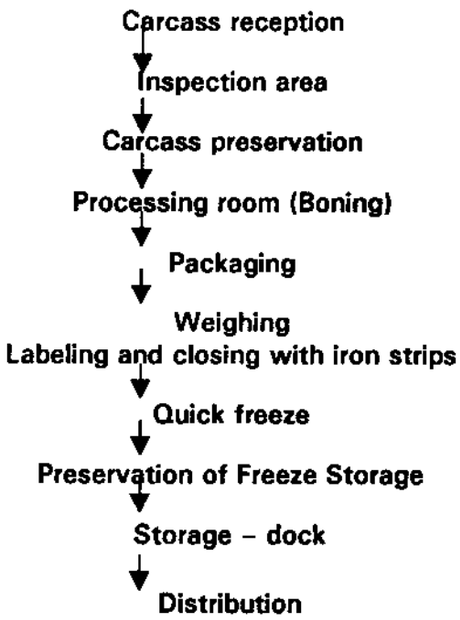
Fresh whole carcasses are also marketed, and these are covered with food grade polyethylene bags.

3.3 Identification of the food's specific use and the consumers:

The products are sold mostly in supermarkets, self-service stores, meat shops that cut the product to sell it in bulk to the general public. Other consumers of the enterprise are restaurants, taco shops, and private individuals buy it by the box. These are cooked or prepared according to the specialty. These products must be completely cooked before their consumption.

3.4 Development of the flow chart

BONING FLOW CHART



3.5 Verification of the flow chart

The HACCP team must follow up the operations and processes in order to verify the precision of the flow chart and modify it whenever it is necessary.

3.6 Performance of the analysis of risk factors:

In this step the most important risks are identified in the process and a list is made of the hazards that are identified associated to each step and the preventive measures for the hazard control.

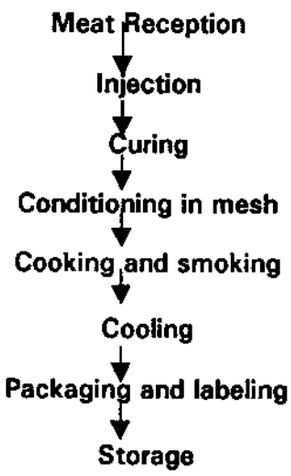
HAZARD FACTORS ANALYSIS

Step	Identified Hazard Factor	Preventive Models
Carcass reception	CHEMICAL: Toxic residues (presence of antibiotics and pesticides) BIOLOGICAL: Microbial contamination (presence of *E. coli*)	Verification through laboratory analysis. Maintenance of the temperature during transportation $\leq$ 4°C verifications through laboratory analysis
Carcass preservation	BIOLOGICAL: Microbial contamination (reproduction of *E. coli*)	Maintenance of the temperature at 2°C $\pm$ 2°C
Boning room	PHYSICAL: presence of extraneous material BIOLOGICAL: microbial contamination and growth	Supervision Application of SOP, SSOP and GMP by maintaining the temperature of the area at $\leq$ 10°C
Packaging and weighing	PHYSICAL: presence of extraneous material BIOLOGICAL: microbial contamination and growth	Supervision Application of GMP by maintenance of the temperature of the area at $\leq$ 10°C
Quick Freeze	BIOLOGICAL: microbial growth	Application of SOP and by maintenance of the temperature of the area at -20°C to -40°C
Freeze preservation area	BIOLOGICAL: microbial growth	Application of SOP and by maintenance of the

		temperature of the area at -18°C to + 5°C
Storage – Dock	BIOLOGICAL: microbial growth	Application of SOP and by maintenance of the temperature of the area at ≤ 4°C
Distribution	BIOLOGICAL: microbial growth	Use of insulated trucks to maintain the temperature of the products.

Another processed product of the enterprise is the smoked cutlet, the fundamental use for this product is to form reactions with nitrites and hemoglobin of meat, incorporating smoking and baking as preservation and marketing methods for this product, obtaining the characteristic coloring of these products. This product is packaged in food grade polyethylene bags and then placed in carton boxes labeled and closed with iron strips and they are maintained at 0°C to 4°C in a refrigerated room that is specific for this product.

DEVELOPMENT OF THE SMOKED PRODUCTS FLOW CHART



Step	Identified Hazard Factor	Preventive Models
Injection	CHEMICAL: contaminated or adulterated ingredients BIOLOGICAL: Microbial contamination and growth	Supplier certificates and follow up of SOP Application of GMP and SSOP

Curing	BIOLOGICAL: rising of the microbial count	Maintenance of the temperature of the area at < 4°C
Cooking and smoking	CHEMICAL: presence of cancerigenic resins BIOLOGICAL: rising of the microbial count or persistence of pathogens	Use of wood that has low resin content Temperature and time control and recording
Cooling	BIOLOGICAL: rising of microbial count	Application of GMP and SSOP
Packaging and labeling	BIOLOGICAL: rising of microbial count	Application of GMP and SSOP
Storage	BIOLOGICAL: rising of microbial count	Refrigeration temperature control at < 4°C

3.6.1 Ingredients

There are chemicals that are associated with foods that are classified according to their common use in the following categories (Appendix A4)

- Color additives
- Food direct additives
- Food indirect additives
- Previously sanctioned substances
- Substances generally known as safe
- Chemical pesticides

In the smoked products different ingredients are used from the categories listed by the United States Department of Agriculture in the rules and regulations (21 CFR 182)

1. Spices and other seasonings and flavorings
2. Essential oils, oleoresin without solvents, and natural extracts
3. Synthetic flavoring substances and helpers
4. Emulsifying agents
5. Sequestering and stabilizing agents

These substances are generally recognized as safe (GRAS) and they are found out of certification:

- Common salt

- ♦ Sugar
- ♦ Carrageen
- ♦ Potato starch
- ♦ Ham seasoning (contains):
  - iodized salt
  - Monosodium glutamate
  - Celery oleoresin

Other substances used in the smoked products are called direct food additives and these are regulated since for them to be used certain concentrations allowed by the United States Department of Agriculture and by the Food and Drug Administration must be kept.

- ♦ Prague salt (nitrites): 156 ppm in the finished product
- ♦ Sodium erythorbate: 550 ppm in the finished product
- ♦ Phosphates: concentration not higher than 0.5% in the finished product.

The water that is used in the production line and in the production process of smoked products is treated with a water softener equipment that has two tanks with resins and filters that trap impurities (inverse osmosis) and an ultraviolet light lamp that guarantees that the water remains with the drinking water characteristics as far as physiological and microbiological requirements are concerned. This is verified by means of periodic analysis performed by the Analytical Laboratory of the Northeast, S.A. de C.V. that is authorized by the Ministry of Health (Appendix A3).

3.6.2. Intrinsic Factors

In the smoked products, substances are employed that cover different functions, such as:

- The nitrites have a bactericidal effect and also give a pink coloring that is characteristic of smoked products. This ingredient must be added in a proportion that is no larger than 156 ppm in the finished product.
- Common salt that is used has a slight preservative action and increments the fixation power.
- The phosphates help reduce the loss of proteins during cooking.
- The smoking has a bactericidal effect, helps give color, odor, and flavor and increment the shelf life of the product due to its preservation effect.
- The addition of erythorbate participates in the stability of the color and avoids the formation of nitrousamines, which are considered as toxic cancerigenic substances that are produced in the cured meats.

3.6.3 Processing procedures

The principal production of the plant is based upon a primary and secondary cut of the swine carcasses. The meat does not receive any thermal treatment through which pathogens may be destroyed. Due to this fact the Sanitation Standard Operation Procedures (SSOPS) are maintained before and during all the process besides keeping at all times good manufacturing practices (GMP).

In the smoked products the cooking temperature control is of vital importance since 146°F – 63°C must be reached in order to destroy pathogenic microorganisms. At all times the crossed contamination must be avoided between the raw product and the cooked product maintaining the latter within the specific area.

3.6.4 Microbiological content of food

The meat that is processed here is packed raw in food grade polyethylene bags and therefore it is not a sterile food, by its own nature, the raw meat has the microorganisms that are found in non-processed foods.

Periodically samples are taken and they are analyzed in the SANA INTERNACIONAL S.A. de C.V. Laboratory approved with number 092 by the General Animal Health Department for the performance of *E. coli* microbiological analysis in raw meat and *L. monocitogenes* for the smoked chops.

The samples are taken every 1,000 carcasses as is suggested by the Food Safety and Inspection Services of the United States Department of Agriculture published in the federal register of rules and regulation (vol. 61 No. 144) on July 25, 1996.

The values for the criteria of performance in marginal and unacceptable *E. coli* for the swine species:

Acceptance Limit	**Marginal limit**	**Unacceptable limit**
Negative	Above 10 ufc/cm^2 but not over 10,000 ufc/cm^2	not over 10,000 ufc/cm^2

The smoked meat as was mentioned previously must be subjected to cooking temperatures of (146°F – 63°C) by means of which pathogenic agents are destroyed that could otherwise contaminate the product and provoke disease in the consumer.

3.6.5 Equipment and Facilities Design

The temperatures of each of the areas are regulated in the Official Mexican Standards NOM-008-Z00-1994.

- Carcass preservation room (0-4°C)
- Processing room ($\leq$ 10°)
- Freezing tunnel (-20°C to -40°)
- Freeze preservation (-18°C $\pm$ 5°C)
- Storage dock (4°C $\pm$ 2°C)

The equipment installed in the production area has been designed in such a manner and is made of adequate material for continuous washing and sanitizing:

- 2 power saws of galvanized material
- 2 stainless steel table – with transporting band
- galvanized material transportation rollers (conveyors)
- 1 "bacon" skin stripper machine
- 2 stainless steel vats-buggies
- plastic boxes
- plastic combos
- 3 stainless steel washbasins
- 3 stainless steel sterilizers
- 1 scale to weigh carcasses
- 3 galvanized tables exclusive for packaging
- 2 cutters (slicers)

The equipment that is part of the smoked production area is of washable material and as is recommended for use in food processing.

- 1 Stainless steel smoker oven
- 1 stainless steel vat-buggy
- 1 stainless steel vat
- 1 injection machine
- 1 stainless steel table with 3 packing bases
- stainless steel hooks
- carts to hang with stainless steel rods
- plastic containers

Design of the Facilities

In the pig reception door there are sanitary bellows so that when the trailers are unloaded there is no space for the introduction of dust or insects since it adheres in such a manner that the sanitary cushions serve as a barrier, also there is this type of cushions or bellows in the dock area.

There are plastic curtains on all the doors that divide each area in order to avoid air currents and the transference of energy that would cause temperature alteration:

- reception – carcass room
- carcass room – production
- production – storage
- production – smoked products
- production – dock
- dock – preservation area
- dock – distribution area
- distribution area – exteriors

There are automatic air curtains that are automatically activated when the doors are opened in the areas of offices – production, dock – distribution.

The smoked product area is located in such a manner that the cooked product is handled within this area in order to avoid crossed contamination. This area also has a refrigerator room exclusive for smoked products and it maintains a temperature between 0°C – 4°C.

3.6.6. Packaging

The packaging is performed in the production area maintaining the product within the cold line in order to avoid the microbial growth and procuring that there is a permanence in the area that is minimal.

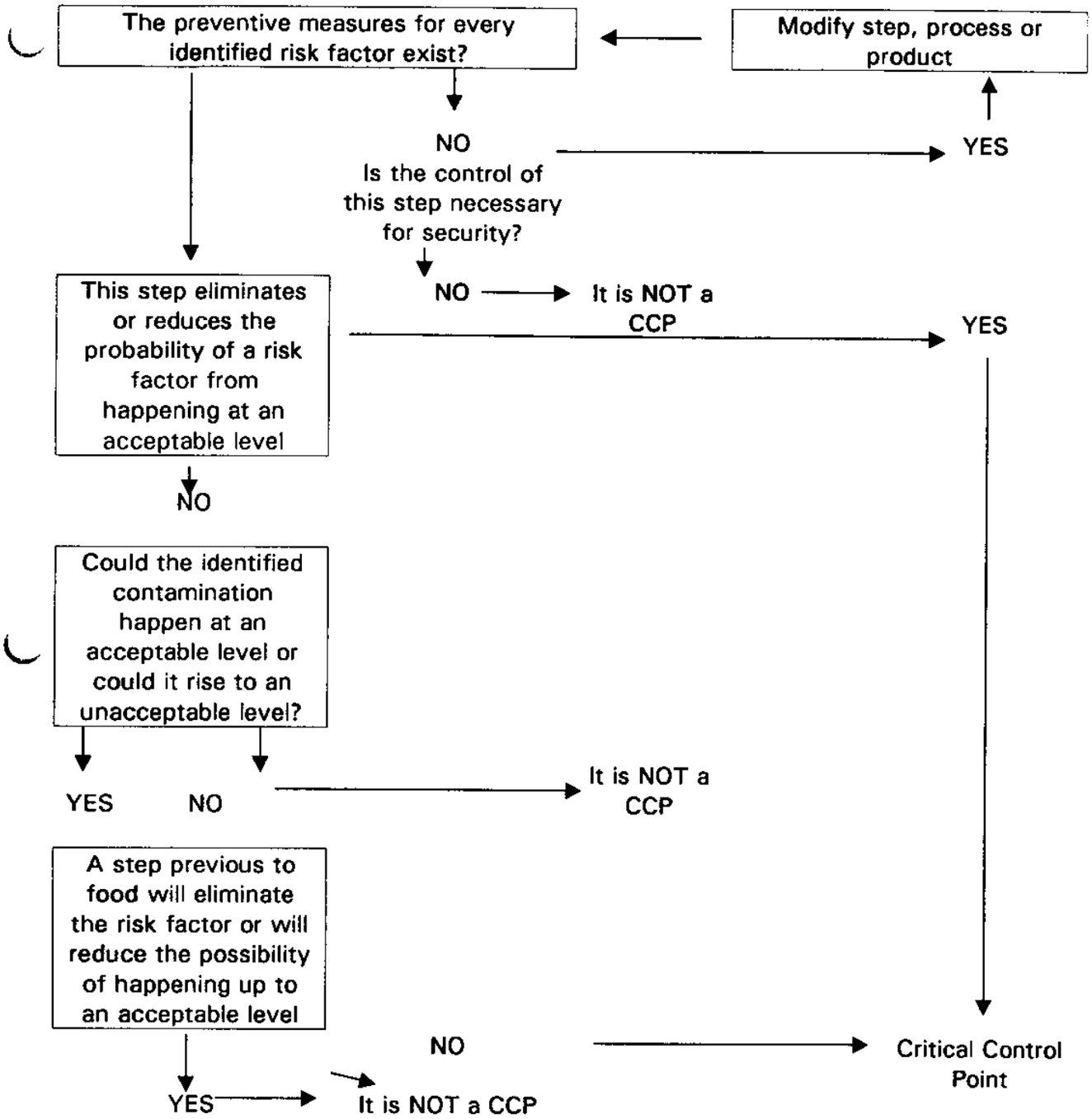
The meat is packaged in food grade polyethylene bags (Appendix B1) and deposited in carton boxes that have the legend "maintain frozen". All boxes are sold closed with iron strips that insure that the product cannot be opened and contaminated.

3.6.7 Health and hygiene of the employee

All personnel have two white coats for personal use that are used alternately and are washed daily, they also have a pair of rubber boots for exclusive use within the plant, they are also given discardable caps and mouth covers and a protective helmet.

When the personnel enter the work areas they must wash their hands in the sanitizing area with a bactericidal soap and then apply a sanitizing gel found in the production area, as well as when going to the bathroom and returning to the work areas. The water faucets in the sanitizing area work by means of electric sensors so that there is no way a person can be contaminated by the contact with the faucets.

The personnel shall not leave the premises with their working gear. It must be handed over at the laundry and when they return they pick it up.


The preventive measures for every identified risk factor exist?
Modify step, process or product
NO
YES
Is the control of this step necessary for security?
NO
It is NOT a CCP
This step eliminates or reduces the probability of a risk factor from happening at an acceptable level
YES
NO
Could the identified contamination happen at an acceptable level or could it rise to an unacceptable level?
YES
NO
It is NOT a CCP
A step previous to food will eliminate the risk factor or will reduce the possibility of happening up to an acceptable level
NO
Critical Control Point
YES
It is NOT a CCP

Identification of the critical control points in the process

Step	Identified Risk Factor	Risk severity	Justification	Is this a CCP step?
#1 Carcass reception	CHEMICAL: toxic residues (presence of antibiotics and pesticides)	Moderate	Comes from TIF and/or USDA plants	NO
	BIOLOGICAL: microbe contamination (presence of *E. coli*)	Severe	By the nature of the product	YES
#2 Carcass conservation	BIOLOGICAL: microbe growth (*E. coli* reproduction)	Severe	If there is a failure to control the temperature the count rises	YES
#3 Bone removal room	PHYSICAL: presence of foreign matter	Moderate	By handling and supervision	NO
	BIOLOGICAL: contamination and microbiological growth	Moderate	By handling of the meat, besides being a good substrate	YES
Packaging and weighing	PHYSICAL: presence of foreign matter	Moderate	By handling and supervision	NO
	BIOLOGICAL: contamination and microbiological growth	Moderate	By handling	NO
#4 Freezing tunnel	BIOLOGICAL: microbial growth	Moderate	By temperature control	NO
#5 Freeze conservation area	BIOLOGICAL: microbial growth	Moderate	By temperature control	NO
#6 Storage dock	BIOLOGICAL microbial growth	Severe	By lack of temperature control	YES
#7 Delivery	BIOLOGICAL: microbial growth	Moderate	By temperature control	NO
Injection	CHEMICAL: adulterated or contaminated	Moderate	By warranty letters of the supplier	NO

	ingredients **BIOLOGICAL:** microbe growth and contamination	Moderate	Use of potable water and handling of meat	NO
Curing	BIOLOGICAL: elevation of the microbiological count	Moderate	By failures in the conservation room	NO

Step	Identified Risk Factor	Risk severity	Justification	Is this a CCP step?
#1 Cooking and smoking	CHEMICAL: presence of cancerigenic resins BIOLOGICAL: elevation in the microbiological count or permanence of pathogens	Moderate Severe	By using non resinous wood If the cooking temperature and time are incorrect	NO YES
Cooling	Biological: elevation of the microbiological count	Moderate	Temperature control and cross contamination	NO
Packaging and labeling	Biological: elevation of the microbiological count	Moderate	Temperature control and cross contamination	NO
#2 Storage	Biological: elevation of the microbiological count	Severe	Temperature control in the room	YES

V. Establishing of critical limits

CCP #	Process Step	Critical Limits (CL)	Monitoring Procedures	Corrective Measures (CM)
#1	Reception	Hog temperature at reception $\leq$ 6°C Microbiological count within allowed limits	**What is going to be measured?** • Internal temperature of the meat • Microbiological count **Where will the CL be measured?** • In the area • In the laboratory **Who will measure the CL?** • Supervisor • Laboratory technician **Who will monitor the CL?** • Supervisor • Supervisor	**How will the process be corrected?** • It is rejected • The lot is seized **How will the product be disposed of?** • Devolution or seizing **Who will be responsible of implementing the corrective measure?** • Plant head
#2	Conservation	Area temperature of 4°C $\leq$ 2°C Meat temperature of $\leq$ 4.5°C	**What is going to be measured?** • Room temperature • Meat temperature **Where will the CL be measured?** • In the area **Who will measure the CL?** • The supervisor **Who will monitor the CL?** • The supervisor	**How will the process be corrected?** • Room thermostat adjustment **How will the product be disposed of?** • Immediate processing **Who will be responsible of implementing the corrective measure?** • Production head
#3	Bone removal	Area temperature of $\leq$ 12°C	**What is going to be measured?** • Area temperature **Where will the CL be measured?** • In the area **Who will measure the CL?** • The supervisor **Who will monitor the CL?**	**How will the process be corrected?** • Room thermostat adjustment **How will the product be disposed of?** • Immediate processing **Who will be responsible of**

			• The supervisor	**implementing the corrective measure?** • Production head
NO	Freezing tunnel	Area temperature of $\leq$ -20°C	**What is going to be measured?** • Room temperature **Where will the CL be measured?** • In the area **Who will measure the CL?** • The supervisor **Who will monitor the CL?** • The supervisor	**How will the process be corrected?** • Room thermostat adjustment **How will the product be disposed of?** • Augment the residence time in the area **Who will be responsible of implementing the corrective measure?** • Production head • Maintenance head
NO	Freeze conservation	Area temperature of -18°C $\pm$ 5°C	**What is going to be measured?** • Room temperature **Where will the CL be measured?** • In the area **Who will measure the CL?** • The supervisor **Who will monitor the CL?** • The supervisor	**How will the process be corrected?** • Room thermostat adjustment **How will the product be disposed of?** • Augment the residence time in the area **Who will be responsible of implementing the corrective measure?** • Production head • Maintenance head
#4	Storage	Area temperature of 4°C $\leq$ 2°C	**What is going to be measured?** • Room temperature **Where will the CL be measured?** • In the area **Who will measure the CL?** • The supervisor	**How will the process be corrected?** • Room thermostat adjustment **How will the product be disposed of?** • Reduce the residence time in

			Who will monitor the CL? • The supervisor	the area **Who will be responsible of implementing the corrective measure?** • Production head • Storage head • Maintenance head

VI. Monitoring establishment

One of the HACCP system pillars is the establishment of monitoring practices that allow the collection of information about the raw materials and each step of the process. This system must be able to guarantee that the process is under control, in other words the criteria established as critical limits are within normal parameters.

The monitoring is a planned sequence of observations and measures that help us evaluate if our CCP are under control.

The three main purposes of monitoring are:

1. It indicates a tendency towards loss of control
2. It is used to indicate when there is loss of control and deviations of a CCP
3. To provide written documentation to be used for verification of the HACCP plan

If the process is not adequately controlled and a deviation occurs it could result in an unsafe food for health. The continuous monitoring is possible with physical methods like temperature and time.

There are many ways to monitor the CCP limits and to write down the information in tables.

The monitoring of measurements include:

- Visual observations
- Temperatures
- Time

The critical control points identified are monitored with the following forms:

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DAILY TEMPERATURE MONITORING

Date:_____

Time Areas	7:00	9:00	11:00	13:00	15:00	Observations
Carcass						
Production						
Dock						
Preserver						
B. freezer						
Smoked						

Checked by:_____

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HACCP MONITORING OF CCP (AREA TEMPERATURE)

Date:_____

Time	Carcass (4°C ± 2°C)	Production (≤ 10°C)	B. Freezer (≤ -20°C)	Preserv. (≤ 18°C)	Dock (4°C ± 2°C)	Smoked (2°C ± 2°C)	Meat Temp.	AC	Observations
6:00									
8:00									
10:00									
12:00									
2:00									

Verified by:_____

Instructions:

1) Document the temperatures in each of the areas at each hour with a margin of ± 10 minutes.
2) Use calibrated thermometers
3) When the temperatures are kept out of the limits for more than 4 hours an HACCP deviation has occurred and it must be documented in the deficiency notification form.
4) Take the appropriate corrective measures to return the process to the established parameters

Corrective Actions (CA):

A. Stop the line
B. Notify the supervisors
C. Retain the product
D. Correct the refrigeration deficiency
E. No corrective measure needed
F. Ice removal from the system

Date: _____

Time	Carcass (4°C ± 2°C)	Production (≤ 10°C)	B. Freezer (≤ -20°C)	Preserv. (≤ 18°C)	Dock (4°C ± 2°C)	Smoked (2°C ± 2°C)	Meat Temp.	AC	Observations
6:00									
8:00									
10:00									
12:00									
2:00									

Verified by: _____

APPENDIX A1

In order to do a good sanitation process in the plant different substances are used and are described below:

Product:	Key Germ-O-Clor
Active Base:	Sodium dichloride isocyanide
Mechanism:	Large spectrum germicide, bactericide, fungicide, viricide. It oxidizes the cellular wall membrane of the microorganisms.
Usage:	Dissolve 30 grams in 10 liters of water Submerge accessories and/or utensils for 10 minutes This 100 ppm concentration does not require rinsing, only and adequate drain according to FDA CFR 21 part 178-1010 regulation in surfaces that come into contact with food
Effective against:	Gram positive (*S. aureus, S. epidermis, S.faecalis,* etc.) Gram negative (*Salmonella, E. coli*, etc.)

Product:	Key Germ-O-Dine
Active Base:	Organic iodine complex
Mechanism:	Large spectrum germicide, bactericide, fungicide, viricide. It oxidizes the cellular wall membrane of the microorganisms. The detergent that it contains allows the disinfectant to penetrate in the surface achieving a complete hygiene of the areas.
Usage:	A 1:800 dilution is made It is applied by immersion or spraying This concentration does not require rinsing, only and adequate drain according to FDA CFR 21 part 178-1010 regulation in surfaces that come into contact with food
Effective against:	Gram positive (*S. aureus, S. epidermis, S.faecalis*, etc.) Gram negative (*Salmonella, E. coli*, etc.)

Product:	Key Germ-O-Cuat
Active Base:	High molecular weight quaternary ammonium salts
Mechanism:	Large spectrum germicide, bactericide, fungicide, viricide. It has a residual bacteriostatic action. It alters the permeability of the cell membrane of the microorganisms.
Usage:	Dissolve 1:400 in water Submerge accessories and/or utensils or by spraying This concentration does not require rinsing, only and adequate drain according to FDA CFR 21 part 178-1010 regulation in surfaces that come into contact with food

Effective against:	Gram positive (*S. aureus, S. epidermis, S.faecalis*, etc.) Gram negative (*Salmonella, E. coli*, etc.)
Product:	Key LD
Active Base:	Sodium dodecil benzo sulfonate
Mechanism:	Degreaser, it reacts with grease, oil and dirt forming a solution that can be totally rinsed.
Usage:	A 1:50 dilution is made The dilution is applied directly over the surface It is scrubbed with a brush if needed
Effective against:	Thick grease
Product:	Key Derm-O-Wipe
Active Base:	Non toxic alcohol
Mechanism:	Large spectrum antiseptic germicide. It modifies the osmotic pressure of the microorganisms allowing great quantities of liquid to enter rupturing the cell membrane.
Usage:	It is applied on the surface of the hands and is rubbed until the product totally disappears
Effective against:	Gram positive (*S. aureus, S. epidermis, S.faecalis*, etc.) Gram negative (*Salmonella, E. coli*, etc.)
Product:	Key Limon
Active Base:	Dimethyl benzyl ammonium
Mechanism:	Oxidizing agent that ruptures the cell membrane wall of the microorganisms. It is a disinfecting and aroma detergent recommended for all types of areas.
Usage:	It is applied on the surfaces at a 1:20 dilution
Product:	Metatec
Active Base:	
Mechanism:	Anti oxidant agent
Usage:	242 grams in 60 liters of water applied by immersion

FOOD PRODUCTS SANITARY UNION, STOCK COMPANY OF VARIABLE CAPITAL TIF NUMBER 95

Microbiological Analysis for Imported Products

DATE	PRODUCT	NUMBER	SUPPLIER	PLANT NUMBER /COUNTRY
6/SEP/00	Combos	20	Chisholm	270/Canada
7/SEP/00	Carcasses	250	Yosemite	548/USA
7/SEP/00	Carcasses	342	Sioux preme	5537/USA
8/SEP/00	Carcasses	337	Sioux preme	5537/USA
9/SEP/00	Carcasses	250	Yosemite	548/USA
11/SEP/00	Carcasses	351	Sioux preme	5537/USA
11/SEP/00	Carcasses	333	Sioux preme	5537/USA
12/SEP/00	Carcasses	341	Sioux preme	5537/USA
12/SEP/00	Carcasses	245	J & M Meats	8/Canada
13/SEP/00	Combos	20	Chisholm	270/Canada
13/SEP/00	Carcasses	250	Yosemite	548/USA
14/SEP/00	Carcasses	337	Sioux preme	5537/USA
14/SEP/00	Carcasses	338	Sioux preme	5537/USA
15/SEP/00	Carcasses	250	Yosemite	548/USA
18/SEP/00	Carcasses	312	Sioux preme	5537/USA
18/SEP/00	Carcasses	164	J & M Meats	8/Canada
19/SEP/00	Carcasses	338	Sioux preme	5537/USA
19/SEP/00	Carcasses	339	Sioux preme	5537/USA
20/SEP/00	Combos	20	Chisholm	270/Canada
20/SEP/00	Carcasses	238	J & M Meats	8/Canada
21/SEP/00	Carcasses	343	Sioux preme	5537/USA
21/SEP/00	Carcasses	250	Yosemite	548/USA
22/SEP/00	Carcasses	355	Sioux preme	5537/USA
23/SEP/00	Carcasses	250	Yosemite	548/USA
25/SEP/00	Carcasses	317	Sioux preme	5537/USA
26/SEP/00	Carcasses	328	Sioux preme	5537/USA
26/SEP/00	Carcasses	242	J & M Meats	8/Canada
27/SEP/00	Carcasses	315	Sioux preme	5537/USA
28/SEP/00	Carcasses	250	Yosemite	548/USA

UNION SANITARIA DE PRODUCTOS ALIMENTICIOS S.A.de C.V. TIF 95
(Food Products Sanitary Union, stock company of variable capital TIF number 95)

"SSOP"

(Sanitary Standard Operation Procedures)

TIJUANA, B.C.

II) SSOP (Sanitary Standard Operation Procedures)

They are written procedures that establish the way by which the company shall prevent direct contamination of the product, using hygienic measures before and during the operations, specifying the frequency of the procedures, also identifying the people responsible of the implementation and monitoring of the SSOP.

These SSOP reports shall be maintained at least during the following six months and shall be available for the people of the United States Food Safety and Inspection Service (FSIS) in charge, for their verification and monitoring.

Description of the sanitation of each of the areas:

1) **Hog reception area.**

This area contains stainless steel vats where the hooks are washed daily by rinsing, degreasing and deoxidizing with the HCP-910 substance (appendix B1) in order to eliminate the rust and grease that could have been accumulated. The wash consists of dissolving the powder in hot water at an approximate temperature of 85 C, staying in it for 45 minutes within the solution, after this time they are rinsed in hot water and submerged in mineral oil, the vats are separated from the rails by plastic curtains.

The trailer where the hogs are transported shall be clean and shall have a cooling system in order to maintain the temperature at $\leq$ 4 C, which couples in such a way that the sanitary cushions act as a barrier that does not allow the entrance of insects and dust.

2) **INSPECTION AREA**

This area is located within the reception area, here the internal temperature of the hog is checked, which must be $\leq$4 C.

3) **CARCASS PRESERVER**

The room for preserving the carcasses has a total capacity of 500 hogs. This room is washed every time the rails are freed either totally or partially, it is washed by a pressure hose of cold water with approximately 2000 pounds pressure in order to eliminate blood and grease stains that are deposited in the walls and floors, and it is sanitized with a disinfectant solution. Before allowing the entrance of hogs into this room, the temperature must be verified that it is at 4 C $\pm$ 2 C. The drains in this area are washed before and after the room is washed. The doors and curtains are washed and oiled daily for maintenance.

4) PROCESSING ROOM

In order to sanitize this area in first place all the solids like grease, small pieces of meat and/or bone are removed and they are deposited in a special container labeled "non edible" all other solids like cardboard, vitafilm and paper are sweeped and deposited in the trash can.

Following this all the area is rinsed down with water at 2000 pounds pressure leaving all the surfaces free of solids. Then it is sprayed with a degreasing solution and it is scrubbed with a plastic brush. It is rinsed again with hot water at the same pressure in order to eliminate the excess of degreasing solution.

Finally all the surfaces of the tables, bands, saws, bacon cutter, walls and floors with a germicidal agent (appendix A1) at the minimum required concentrations and let it stay on all the surfaces in order to maintain the microbiological standards at a low level, two different solutions are alternated to prevent resistance in the microorganisms (MP-1 form).

These procedures are done daily in all the production area including the cleaning of the drains that are purged by removing all the solid residues they might have and depositing them in plastic bags in the trash cans, the drains are rinsed down and an Iodine solutions is added, and once every week a drainage cleaner is added "bacterial digestor" (appendix B).

The plastic boxes, combos and carts that are used are washed with soap and hot water, and sprayed with a bactericidal solution used in all the area.

The doors and curtains are washed and dried, and then they are rubbed with mineral oil.

The false ceiling of the area is washed periodically as well as the lamps, rails and existing metal structures.

In the production area three wash basins are installed with their corresponding disinfectant soap (appendix A1) and towels, as well as two hand germicide solution dispensers (appendix A1). Each one has a stainless steel sterilizer used by the butchers to sanitize their work utensils; the water of these must be running and at an 82.5 C temperature as specified in the NOM-0087-ZOO-1994 section 10.2.

Furthermore, in this area there are several stainless steel tubs, in which the work utensils are washed (knife, sharpening rod, steel glove, scabbard) at the beginning of the activities as well as at the rest period, when clean they are submerged in a chlorine solution at a 100 ppm concentration for a

period of 10-15 minutes. This concentration does not require rinsing, only and adequate drain according to the FD CFR 21 part 178-1010 regulation for surfaces that come into contact with food.

5) **FREEZING**

This area is for rapid freezing to which the meat is subjected at a temperature of 25 C $\pm$ 5 C remaining in this place on steel shelves for a period of approximately 15 hours and then it is transported to the freeze maintenance area. The cleaning of the freezing area is done periodically sweeping the iron strips or cardboard that could accumulate and according to the needs of this area.

6) **FREEZE MAINTENANCE STORAGE**

In this storage area is where the merchandise remains for a period no loner than sixty days, before the sale the area is maintained at a temperature of −15 C $\pm$ 3 C, the area is cleaned daily, sweeping the trash, cardboard, paper, seals, etc. as well as arranging the boxes avoiding contact with the floor, the cleaning of this storage area is done according to its particular needs, the floors are washed with hot water and drying them immediately so the water doesn't freeze, after this a degreaser is added and it is rinsed once more.

7) **STORAGE (INTERIOR DOCK)**

This area is used for sorting the merchandise that shall be delivered for sale, the temperature of this dock must be maintained at $\leq$ 4 C, it is sweeped every day and the dais are arranged, it is washed weekly with a hose at 2000 pounds pressure, the lamps, curtains, false ceiling and diffusers are cleaned with a cloth wetted with degreaser.

8) **DISPATCH (EXTERIOR DOCK)**

This area is destined to deliver the merchandise to the buyers, it is sweeped daily, the trash is disposed of and the floor is washed weekly, in this area there are plastic curtains to prevent the entry of insects and dust, the air exchange of air and loss of energy, said curtains are cleaned and oiled every day, there is also an air curtain in the most transited zone.

9) **DELIVERY EQUIPMENT**

Trucks are the equipment where the merchandise is transported for its delivery; they are washed daily in the inside and the outside. The interior of the cargo area of the truck is washed with detergent and water and they are scrubbed with brushes in order to facilitate the work and it is rinsed

down with water. The rest of the truck (exterior) is washed with soap and water.

10) **SMOKING AREA**

In order to sanitize this area, in the first place, all the solids like grease, small pieces of meat are removed and the floors and walls rinsed down with hot water until all the grease residues are removed, then they are sprayed with a degreasing solution, as well as the vats, tables, cans and machinery used, rinsing the whole area with hot water, all the surfaces are sprayed with a germicidal solution and is let to stand until the following day. The minimum permitted concentrations are used so that no rinsing is needed.

The injection machine is washed daily to prevent accumulation of residues in the needles and in the hose that could generate the reproduction of microorganisms, applying disinfectant after that.

The smoking oven is washed after each use, it is rinsed down with hot water to remove the excess of grease from the floor and walls, a degreasing solution is then applied and it is scrubbed with a brush and a fiber pad, it is rinsed down with hot water and a chlorine sanitizing solution is added at a concentration of 100 ppm.

The drains are cleaned daily and an iodine germicidal solution is added to prevent the growth of microorganisms.

The smoking cold room is for the exclusive use of these products, it must be maintained at a temperature of $\leq$ 4 C, the products must be in packages when stored and sealed in a cardboard box, and stay there for a period no longer than 5 days, this room is cleaned every two days with water and a degreasing solution, after which it is rinsed down with water and adding a disinfectant solution afterwards.

Within this area there is an ingredient room which is cleaned every day, said ingredients are stored in plastic containers with lids and are labeled on their exterior surface.

The metal parts of the area are washed every day, dried and then rubbed with mineral oil.

11) **Offices**

The administrative offices are cleaned at the beginning of the day before the entrance of the personnel, they are sweeped, the trash collected and deposited in the corresponding trash cans, the floors are cleaned with a disinfectant and aroma solution of pine oil. The desks are dusted and cleaned with an ammonia degreasing solution that gives aroma and

removes stains. The exterior stairs, which give access to the offices, are sweeped and moped every day in the morning.

12) **DINNING ROOM**

The dinning room is cleaned twice a day, in the morning and at noon, after it is used by the production employees, al the food residues and trash is collected, it is sweeped and moped with a degreasing solution and the tables as well as the cupboards and microwave ovens are cleaned with an ammonia degreasing solution, the windows and the curtains are cleaned twice a week.

13) **BATHROOMS**

This area is cleaned and washed every day in the morning, the paper and trash is sweeped and collected and it is deposited in plastic bags, the toilets and urinals are cleaned with a special solution for these areas which is a disinfectant and cleaner that is sprayed on and then scrubbed with a special brush, it is left to act for 5 minutes and then rinsed with water. The floors, doors and walls are washed with water and a pine solution.

14) **LAUNDRY**

The cleaning of this area is done daily, it is sweep and moped with a degreasing solution of pine oil and the windows are cleaned with an ammonia degreasing solution.

15) **MAINTENANCE SHOP**

This area is sweeped every day to prevent the accumulation of trash, the material and work tools that are stored there are placed in steel shelves for easy finding.

The oil storage area is sweeped periodically, the tanks must remain closed until they are needed.

The metal curtain of the shop is cleaned regularly with a cloth and a degreasing solution.

16) **EXTERIORS**

The cleaning of streets and sidewalks is done daily, sweeping them and depositing the trash in the corresponding cans, the parking for clients and for delivery are sweeped every day in the morning and the plants of the flower stands are watered at least three times a week and/or when it is required, the grass and shrubs located near the buildings and facilities of

the plant that could constitute and attraction, place of reproduction or home for pests are cut periodically.

The roads, gardens and parking lots are maintained in good condition so they do not constitute a source of contamination.

17) WORK CLOTHES

The gowns used by the personnel are washed daily with soap and hot water and they are subjected to chlorine at 100 ppm in order to disinfect them, the work material, steel sharpener, knife, scabbard, steel mail gloves, must be given back by the users completely clean and they are deposited in a special box so that the following morning the are placed in a 100 ppm free chlorine solution for a period of 10-15 minutes before they are used. This work materials are sanitized once more in the same type of solution as described before, at noon during the break.

When the personnel goes to work they must wash their hands in the sanitation area and apply the sanitizing gel located in the production area, as well as when they go to the bathroom and return to their work. The water feeds that exist in the sanitation area work by means of electrical sensors in such a way that there is no way to contaminate oneself by contact with the faucets, there are two air dryers that activate by means of an electrical sensor.

The personnel shall not go out to the street with its work equipment, it shall be delivered in the laundry area and when re entering it shall be given back.

Monitoring establishment

Monitoring is a planed sequence of observations and measurements that help us evaluate if our SSOPs are under control.

The three main purposes of monitoring are:

1- Indicate a loss of control tendency
2- Indicate when control has been lost and deviations
3- Give written documentation to be used in the verification of SSOP

The measurement monitoring includes:

- Visual observations

Next, the forms used for monitoring the areas of the sanitary standard operation procedures (MP-2).

OPERATIONAL SSOP

Responsibilities of the person in charge of the reception area

Person in charge: Juan Manuel Padilla

1. Contribute to USPA quality by always handling the product with care and according to the sanitation rules (correct use of the equipment, cheek basket, prevent losses by broken back, etc.)

2. Supervise all the auxiliary personnel of the reception area, making sure that they always fulfill their responsibilities.

3. Check the number of unloadings programmed for the day with the supervisor.

4. Supervise the personnel rotation for unloading.

5. Deliver the unloading weights to the supervisor.

6. Teach all the auxiliary personnel of the area so they can work in any responsibility assigned within the area.

7. Fulfill al the responsibilities assigned in the cleaning and unloading lists.
8. Supervise the washing of trucks and hooks (Yosemite).

Responsibilities of the reception personnel

GENERAL

1. Contribute to USPA quality by always handling the product with care and according to the sanitation rules.

2. Help in other tasks and in cleaning when needed, according to the needs of the company (throw the trash away, take cardboard down, etc.)

3. Maintain the whole plant free of trash and in order.

1) **Reception area and pulley washing auxiliary person**
Juan Manuel Padilla

- Wash and maintain constantly clean the whole carcass reception area including the carcass room and pulley washing room (floors, walls, ceiling, rails, beams, scale, hoses, single whip, vats, trash cans, drains, sanitary cushions, steel curtain, doors, curtains, steel stools, etc.)

- Wash bone combos when they are freed
- Wash pulleys daily giving hem rotation
- At the end of the work day supervise that everything is left clean and in order in order to begin work the following day (lights off, doors closed, gas and air extractor off, etc.)
- In general, maintain clean any area of the plant accordingly.

UNION SANITARIA DE PRODUCTOS ALIMENTICIOS S.A.de C.V. TIF 95
(Food Products Sanitary Union, stock company of variable capital TIF number 95)

"QUALITY CONTROL"

TIJUANA, B.C.

UNION SANITARIA DE PRODUCTOS ALIMENTICIOS S.A.de C.V. TIF 95
(Food Products Sanitary Union, stock company of variable capital TIF number 95)

Due to the exposed demand of improved quality of the manufactured products it becomes necessary to implement a quality control system which embraces constant supervision in the areas of production, packaging, vacuum packaged product, baling, follow up in freezer, preserver and storage areas.

The points to be supervised, amongst others are:

- Good appearance of the products (fat quantity, content of blood, yellowing due to bad storage)
- Cuts according to specifications and no mistreatment (wounds)
- Product temperature
- Residence time of the product
- Correctly packaged bag (totally covering the meat)
- Meat at the box level in order to avoid losses and box collapsing
- Iron strips placed correctly

The activities must be focused at all times on quality control of the products, supervising that they always are handled carefully and according to the sanitary rules.
Other points to be evaluate but that are not under their responsibility are:

- Amount of meat on the bone
- Amount of losses on the floor (trimmings)
- Cuts in correct way
- Meat accumulated over work tables, combos or gondolas

Construction that allows them to be maintained in appropriate sanitary conditions. In each cold storage area and freezer used for storing or keeping foods that could provoke microorganism growth have a thermometer or a temperature read out in order to show constantly the area's temperature.

All the instruments and controls used to measure or record temperatures must be kept exactly and adequately and in enough quantity for their use as it is needed.

Union Sanitaria de Productos Alimenticios S.A de C.V.
TIF 95
Quality Control Monitoring Page

Freezer

Date

Time	Time	Diffuser Space	Door	Iron strips	Boxes (order)	Shelves (order)	Rollers	Observations/signature
6:00								
8:00								
10:00								
12:00								
14:00								

Cuts

Time	Time	Cut #1	Appearance	Cut #2	Appearance	Cut #3	Appearance	Cut #4	Employee #	Observations/ signature
6:30										
8:30										
10:30										
12:30										
14:30										

Packaging

Time	Time	Product	Bag	Box Weight	Appearance	Iron strips	Boxes	Employee #	Observations/signature
7:00									
9:00									
11:00									
13:00									
15:00									

Vacuum

Time	Time	Product	Bag	Box Weight	Appearance	Boxes (free space)	Employee #	Observations/signature
7:30								
9:30								
11:30								
13:30								
15:30								

Instructions

Document the time in each of the observations within a margin of ± 10 minutes
Write down the codes in each case
Take appropriate corrective measures in order to take the process to the established parameters

Corrective Actions

OK. Corrective action not needed
P. Stop the line
Q. Remove or retain the product

R. Report/notify the supervisors

Observations
XG. Leaving excess fat
XC. Removing meat excessively (slashing)
MH. Loss of meat on the bone
MP. Loss of meat on the floor
CE. Meat on top of other meat
OK. Correct
MAL. Incorrect
PP. Wounds
DC. Leaving skin

Verified by: _____
Name: Date: Time:

UNION SANITARIA DE PRODUCTOS ALIMENTICIOS S.A.de C.V. TIF 95
(Food Products Sanitary Union, stock company of variable capital TIF number 95)

"GMP"

(Good Manufacturing Practices)

TIJUANA, B.C.

I) GOOD MANUFACTURING PRACTICES

Good manufacturing practices are followed in the manufacturing, packaging and handling of the products.

Based on the Food and Drug Administration of the Human and Health Services Department 21 CFR Part 110.

A) CLEANNESS

All the people that work in direct contact with the food, the surfaces in contact with the food and with the packaging materials follow strict hygiene standards during work hours, up to the point where it is necessary in order to protect the food from contamination. The methods used to maintain hygiene include, but are not limited to:

1- The use of adequate work clothes for the operations that prevent food, contact surfaces or packaging materials contamination.
2- To keep an adequate personal hygiene.
3- Washing of hands and disinfecting them in adequate facilities before beginning work, after every time the workstation is left and every time the hands may be dirty or contaminated.
4- Avoid all pieces of jewelry and any other object that can fall into the food, the equipment or the containers.
5- Keep the gloves intact, clean and in sanitary conditions, avoiding natural fiber materials (wool, cotton) and using synthetic materials and/or stainless steel.
6- Usage in an effective way of a coif, mouth covers, and any other type of protection that covers the hair, whenever it is appropriate.
7- Store clothes and other personal belongings in specific areas and far from the food, where they are not exposed o where the equipment and utensils are cleaned.
8- Refrain from eating, smoking, drinking or chewing gum in the areas where the food is exposed or where the equipment and utensils are cleaned.
9- Take any precaution to protect the food, the surfaces in contact with packaging materials against contamination by microorganisms o foreign substances including, but not limited to, sweat, cosmetics, tobacco and any medicine applied to the skin.

B) EDUCATION AND TRAINING

The personnel responsible for the identification of the sanitary failures or food contamination have background in areas of education or experience or a combination of both in order to provide enough of the interactions needed to produce a clean and safe food. The operators that handle the food and the supervisors have the adequate training in food handling techniques and principles of protection, and are well informed about the dangers of a bad personal hygiene and unhealthy practices.

C) SUPERVISION

The persons responsible for the compliance by the personnel of all the requirements of this part are clearly assigned.

D) BUILDINGS AND FACILITIES

Adjacent land: the land adjacent to the plant, under their control, are maintained in such conditions that protection against contamination is obtained, the methods for and adequate maintenance are, but not limited to, the following:

- Adequate storage of the equipment, collection of trash and waste, grass and shrub trimming in the areas immediate to the buildings and plant facilities that could constitute an attraction, place of reproduction or home to pests.
- Maintenance of the roads, gardens and parking lots in good condition so that they do not transform into contamination areas.
- Maintain in good condition the drainage areas that could contribute to food contamination by letting liquids escape that creates places for pest reproduction.
- Operating adequate waste handling systems so that they do not constitute a source of contamination.

E) PLANT CONSTRUCTION

The plant building and the structures are adequate in their size, design and construction in order to facilitate maintenance and the necessary operations for the purposes of manufacturing food. The plant and facilities:

- Give sufficient space for placing equipment and storage of materials as needed for the maintenance of the sanitary operations and the production of safe food for consumption.

- Allow the necessary precautions to be taken in order to reduce the potential contamination of the food, surfaces in contact with food or packaging materials with microorganisms, chemicals, dirt or any other foreign material.

- The contamination potential is reduced with adequate security control, operation practices and with an effective design, including separation of operations in which contamination could occur, by any one of the following factors: location, division time, air flow, closed systems, etc.

- Allow the necessary precautions to be taken in order to protect the food in exterior containers against fermenting, using any one of the following methods:

  a) using adequate coverings
  b) controlling the exterior areas of the containers in order to eliminate pests
  c) regularly checking the area in order to avoid pest infestation

- Are constructed in such a way that the floors, walls and ceilings can be cleaned in an adequate manner and be maintained clean and in good condition, so that condensation and drops from the ducts, pipes or equipment do not contaminate food, contact surface or packaging. There are corridors or work spaces between the equipment and the walls of an adequate size to allow the workers to do their job without contaminating the surfaces by touching them with their clothes or by direct contact.

- Allow adequate lighting in the hand wash areas, dressing rooms and bathrooms and all the areas where the food shall be examined, processed or stored and where the equipment and utensils are washed and provides protection against light bulbs, neon lamps or any other glass surface suspended above the exposed food at any stage of its preparation in order to avoid food contamination in case of shattering of the glass.

F) SANITARY OPERATIONS

1- General maintenance – the building, equipment and other physical facilities of the plant are maintained in adequate sanitary conditions and in sufficiently good repair conditions to avoid adulteration of food. The cleaning and sanitation of the utensils and equipment is done in such a way that it protects

food, surfaces in contact with food and packaging materials against contamination.

2- Substances used for cleaning and disinfecting - storage of toxic materials: The cleaning compounds and disinfecting agents used are free of microorganisms, they are safe and adequate under usage conditions. The compliance with these requirements can be verified in any way, including the purchase of these substances under warranty or certification from the retailer (appendix A1). Only the following toxic materials can be used or stored in plants where food is processed or stored:

i- Those necessary for keeping the necessary sanitary conditions.
ii- Those necessary for laboratory analysis procedures.
iii- Those necessary for maintenance and operation of the plant's equipment.
iv- Those necessary in the operation of the plant.

3- Cleaning compounds – toxic products, disinfecting substances, chemicals. Other Federal, State or Local government agencies are obeyed for the application, usage or storage of these products.

4- Production plant – adequate safety measures must be taken in order to avoid the presence of pests in the processing areas and to protect these against contamination. The use of insecticides and poisons for rodents is allowed only under strict precautionary measures that protect food, surfaces in contact with food or packaging materials from contamination (appendix A2).

5- Cleaning of the surfaces in contact with food – all the surfaces that come into contact with the food including utensils and equipment are cleaned as frequently as necessary in order to avoid food contamination.

a) The contact surfaces used in manufacturing or storage of food of low humidity are in dry sanitary conditions at the moment of their use. When these surfaces are cleaned and disinfected they must be dried perfectly before being used again.

b) During humid processing, when it is necessary to clean the surfaces in order to prevent the introduction of microorganisms into the food, all the contact surfaces are cleaned and disinfected before their use and after every interruption during which they could have been contaminated. Wherever the equipment and utensils are used in a continuous operation they are cleaned and disinfected as needed.

c) The surfaces that do not come into contact with food during operation of the production plant are cleaned frequently as needed in order to avoid contamination.

d) All the articles that are used only once as are paper cups and towels are stored in adequate containers and are used and disposed of in an adequate form in order to avoid food or contact surfaces contamination.

e) The disinfectant agents are adequate and safe under usage conditions. Any installation, procedure or machine can be used for cleaning the utensils and equipment, provided that this installation, procedure or machine provides adequate cleaning and disinfecting treatments.

6- Storage and handling of portable equipment and utensils – the equipment and utensils that have been disinfected and that have surfaces that come into contact with food are stored in such a place and in such a manner that they are protected from contamination.

G) SANITARY INSTALLATIONS AND CONTROLS

The plant is equipped with adequate sanitary installations that include, but are not limited to, the following:

- Water supply – said supply is sufficient and adequate for operations. The water that comes into contact with food or contact surfaces is potable and has an adequate sanitary quality. Periodically laboratory analysis are done in order to prove its quality, said analysis are done in a Health Ministry approved laboratory (appendix A3). In all the areas that it is required there is running water at adequate temperature and pressure as needed for food processing, cleaning of utensils, packaging of food and in the sanitary facilities for employees.

- Plumbing – it is of adequate size and design and with a maintenance that allows:

  i- Takes enough water quantity to the places in the plant where it is required.
  ii- Adequately disposes of water and liquids towards the outside of the plant.
  iii- Prevents the facilities from becoming a contamination source for food, water supplement, equipment and utensils.

iv- Gives an adequate floor drain in the areas where the floors are subject to washing by flooding or where the normal operations discharge or throws water or liquids directly to the floor.

v- Makes sure that there are no back flows from or between connections that take the discharge and water used in the production.

- Wastewater – this type of discharge must be done to an adequate sewer system or this water must be disposed of by other adequate methods.

- Bathrooms – the plant provides for its employees adequate and accessible bathrooms and complies with the following requirements:

  i- Maintains the facilities in good sanitary conditions.
  ii- Maintains the facilities in good repair condition all the time.
  iii- Has individual doors
  iv- It has doors that do not open towards the areas where the food could be exposed to contamination by air. Except in areas where protection measures have been taken against said contamination like double doors or air curtains.

- Washbasin. The facilities for washing hands are always adequate and convenient and always have running water at an adequate temperature, the compliance with this requirements is obtained by:

  i- Facilities to wash and disinfect hands in each place of the plant where good sanitary practices require that the employees wash and disinfect frequently.

  ii- Effective soaps and disinfectants

  iii- A service of paper towels or air dryers

  iv- Apparatus such as water control valves designed and constructed to avoid recontamination of hands

  v- Signs that indicate to the employees that keep food or packaging materials or touch the surface that come into contact with food how to appropriately wash and disinfect their hands before initiating their activities, after every leave from their work station and when their hands have become dirty or contaminated. These signs must be placed in processing areas and in all the other places where the employees handle food, materials or surfaces.

- Disposal of waste and leftovers. This type of discharge is collected, stored and disposed of in such a manner as to reduce the production of odors, the potential that the waste becomes a home for pests and to protect against contamination of the food, contact surfaces, water supplies and adjacent land.

H) EQUIPMENT AND UTENSILS

All the equipment and utensils of the plant are designed in such material and manner that they are easy to clean and can be maintained appropriately. The design, construction and use of the equipment and utensils prevents the adulteration of food with lubricants, fuels, metal fragments, dirty water or any other type of contaminants. All the equipment is installed and maintained in such a way that it facilitates its cleaning and of the adjacent areas. The surfaces that come into contact with food are made of non toxic materials and assigned to resist their use and the action of the food and if applicable the cleaning compounds and disinfecting agents. The contact surfaces are kept in such a way that they protect the food from being contaminated by any means including illegal additives.

The contact surface joints are smooth and uniform and are kept that way to reduce the accumulation of food, dust and organic material particles and therefore reduce the opportunity of microorganism growth.

The manufacturing or foods handling areas equipment that does not come into direct contact with the product shall be built in such a way that it can be kept clean all the time.

The detection, mixing and manufacturing systems as well as the gravimetric, pneumatic, closed and automated systems have such a design and construction that allows them to be kept in appropriate sanitary conditions.

In each cold storage area and freezer used for storing or keeping foods that could provoke microorganism growth, there is a thermometer or a temperature read out in order to show constantly the area's temperature.

All the instruments and controls used to measure or record temperatures must be kept exactly and adequately and in enough quantity for their use as it is needed.

UNION SANITARIA DE PRODUCTOS ALIMENTICIOS S.A.de C.V. TIF 95
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"Fumigation"

- Procedures and frequency
- Location of rodent traps
- Fumigation certificates
- Corrective measures

FUMIGATION AND RODENT CONTROL

Natural methods for controlling insects and rodents:

1. Maintain the general cleanliness of the areas in order to deter from nesting.
2. Continuous trash collection within and in surrounding areas of the facilities, also there is a private trash collection service which is done every day to avoid decomposing of the residues.
3. Sealing of all the cracks (holes) with glue, seals or silicones whichever the case may be in order to prevent noxious fauna from entering.
4. Dust guards in all of the doors to avoid the entrance of rodents.
5. The surrounding areas of the facilities are free of shrubs and waste accumulation.
6. Maintaining the gardens, roads and parking lots in such conditions that they are not contamination areas.

PRODUCTS

Products recommended for urban use by the Environmental Health Ministry are utilized.

- Pyrethrums: extremely low in odors, rapid spectrum, with no solvents and without contamination risks, it is a product recommended for food production areas.
- Siege and Xactadose: they are designed for the use directed towards cracks and cockroach congregation and infestation areas, as well as in frequent transit sites. This ensures that the insecticide bait shall be in the areas where the cockroaches feed, but inaccessible to pedestrian transit. It is one of the most effective and precise combinations available in the international market.
- Demon PH: it is a pyrethrum insecticide with 400.00 grams of the active ingredient cypermethrin per kilogram. It possesses a high insecticide activity that allows the professional controller to eliminate a large array of insects that are noxious to humans.
- Rat poisons: slow acting anti coagulant baits are placed in single dose so that they do not reject the product, also they are installed in non toxic glue traps in strategic locations in order to corroborate the non existence of rats.

PROCEDURES AND FREQUENCY

The fumigation operation is done after working hours every last Saturday of each month in order to encompass the spectrum of each substance. Using spraying pumps and P.T. for holes and cracks. This is done in all offices, dinning rooms, bathrooms, laundry and exteriors.